



THOMAS G. NEWMAN, Editor.

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Life is a Leaf of Paper White,
Whereon each one of us may write
His word or two—and then comes night.

Our Friend, G. M. Doolittle, is reported "on the sick list." We trust it will not be long before he may be reported as "fully recovered," and busy with his daily duties in the apiary.

A Pound of Bees, in early spring, with a good queen and a liberal use of comb foundation in the brood-chamber and sections, will rapidly build up into a good colony, and if the season is favorable, will store considerable honey during the summer.

A Damp Cellar is more deadly than dynamite! Do not live in a house with a damp cellar. In a family of seven, two have just died, and five are ill with typhoid fever—all from a wet cellar; the drain having become filled up.

Dr. Brown, of Georgia, lost his residence by fire on April 29. Loss, \$4,000; no insurance. We could hardly believe that Dr. Brown could be so very unmindful of his interests as to neglect to insure his property. That is a duty no one should neglect. Our sympathies are with our friend in his loss.

"Florida Bee-Keeping has had a setback," says a correspondent. "About one-half of all the bees here in January of last year are now dead. The 85 colonies brought here from Iowa by Mr. Poppleton, were nearly all dead at last accounts." This is very discouraging to apiarists in Florida.

J. C. Melcher, who inserted a small advertisement 5 or 6 times in the BEE JOURNAL recently, writes as follows: "I have received several hundred answers to that advertisement." This shows the value of judicious advertising in the AMERICAN BEE JOURNAL.

Liquid Honey.—In answer to a query on page 292, Mr. G. W. Demaree makes this announcement:

I have found by 8 years' experience, that the word "extracted," as applied to liquid honey, has damaged my trade in the article severely. In all these years I have failed to teach my nearest neighbors to adopt the misnomer. I have given it up in despair, and now call it *liquid honey*.

The only objection to calling it "liquid honey" is the fact that very soon after it is taken from the combs, it granulates, and then it is *not a liquid*! As well might you call *ice liquid water*! as to call this candied-sweet *liquid honey*! It would be an unfortunate misnomer!! At the convention of the North American Bee-Keepers' Society in 1879, the following resolution was passed unanimously:

Resolved, That the North American bee-keepers, in convention assembled, do earnestly ask the commercial reporters of the newspapers to use the words "extracted honey" instead of "strained honey" in their price-current reports.

Until a better name—one that can be truthfully applied to it—can be found or invented, we must stick to the name "extracted honey." Not that it is unobjectionable, but it is the best that has been presented so far! The chief objection to it is the fact that there are now so many "extracts" on the market, and some people think that this is the "extract of honey"—not the real thing! We would like a change—but it must be also an *improvement*!

No Patent Bee-Hives.—Some evil-disposed person in Indiana is reported to have stated that the Editor of the BEE JOURNAL had positively asserted "that there were no patent bee-hives in the United States."

We do not know who the person is, but the report to us comes from Warren County, Indiana. We now publicly deny ever having written or stated verbally any such thing! and demand the proof for such a charge!

More than any other publisher of a newspaper have we said in favor of respecting patents, and the rights of individuals to their inventions, as guaranteed by the United States Government! Such a charge is not only a deliberate and *cruel falsehood*, but "made up out of whole cloth," devoid of any single thread of truth!!

Our correspondent asks us if we do "not know that James Heddon, of Michigan, has a patent on a hive?" Most certainly we do! and we also know that hundreds of others have patents on hives! The total number of bee-hives patented in the United States up to this date, will not vary much from 850! Of these, 591 bear date prior to Jan. 1, 1874! The number of United States patents issued on bee-hives up to Jan. 1, 1886, were 810! The next malicious falsifier will please step to the front! Next!

An Apicultural Congress and Exposition is to be held in Hanover next fall. The Minister of State will award the premiums to exhibitors. The money prizes offered amount to \$1,500 besides the medals. German apiarists are a vigorous and pushing lot of individuals, and leave no stone unturned to make a large show of honey, and thus educate the people to eat honey in place of other sweets.

A Bold Trickster in St. Louis has been doing business on a very small capital and a mountain of "cheek!" He bought a very small stock of groceries of a wholesale firm for cash, and then used the wholesale firm's name without authority, for reference to those whom he proposed to swindle in large amounts.

From one man in Indiana he had ordered a car-load of butter-tubs; from another, willow-ware. Dun's and Bradstreet's agencies were overwhelmed with inquiries about him. They started an investigation, and learned that he had flooded the country with letters soliciting flour and other goods from millers and dealers, and giving them for reference. A number of millers believing his statements, shipped him large consignments of flour, some of which he has disposed of at half their value. They are still waiting to be paid, although the understanding was that the transaction should be conducted for cash.

This illustrates in some measure how producers are swindled out of their goods, by shipping them to irresponsible persons, who intend to *swindle* every one they can.

No one should send money to be sold on commission without first finding out if the parties they ship to are reliable, and good for at least twenty times the amount of the goods to be shipped to them.

The moral taught in the above is—never to ship goods or pay money to any one with whom you are unacquainted, without first ascertaining whether they are responsible and have good credit!

Shade for Hives.—In the *Flowman*, Mr. C. H. Dibbern gives the following as his advice on the above topic:

There will be many hot days during this month, and the bee-keeper should provide some protection both for himself and the bees. Small trees, if not allowed to grow too thick, so as to obstruct the flight of the bees, furnish a grateful shade for both. The bees seem to appreciate the shade, as well as man, and will seldom leave a hive if placed in the cool shade of a tree. If no trees are at hand, then some protection by covering the hives with boards is desirable.

Failures.—Who make them? Why the men who lose heart and fail to continue the journey once begun. The man who starts for the city of Success, and gets part way and then returns to the starting place to take another road, and again pursues his journey for a little distance only to turn back, never reaching the city. It is only he who, setting out, keeps his face as a flint, and turns neither to the right hand nor to the left, that enters the city in triumph.—*Exchanges.*

Beeville, in Bee County, Texas, situated about 25 miles from the bays that fringe the Gulf of Mexico, ought to be a good location for bees. It is generally rolling prairie, with a soil of dark, sandy loam. The county contains 900 square miles, and has a population of about 3,000. One-fourth of the county is covered with timber. We have often had letters inquiring about different parts of Texas as a location for bee-keeping. Our correspondent has resided there for 28 years, and will answer letters about that county, if addressed to "County Judge," Beeville, Bee County, Texas.

QUERIES

With Replies thereto.

[It is quite useless to ask for answers to Queries in this Department in less time than one month. They have to wait their turn, be put in type, and sent in about a dozen at a time to each of those who answer them; get them returned, and then find space for them in the JOURNAL. If you are in a "hurry" for replies, do not ask for them to be inserted here.—Ed.]

The Flavor of Extracted Honey.

Query 415.—1. Can extracted honey be put on the market of as high and delicate a flavor as comb honey of the same kind? 2. If so, give the best method of securing and handling the same?—N. J.

1. I think so. 2. Be sure that it is thoroughly ripened.—A. J. COOK.

Yes, sir. There is not space here to give my method of working for extracted honey.—JAMES HEDDON.

1. I hardly think it can. 2. I will let others answer the second question, as I have little experience.—G. M. DOOLITTLE.

1. Yes. 2. Your best method of handling and securing depends altogether upon what sort of a market and customers you have.—J. P. H. BROWN.

These questions hardly belong in this department. It would require a long article to explain the matter fully.—J. E. POND.

1. My experience is that it cannot. The finest quality of honey will ever be sold in the comb.—G. L. TINKER.

I think so. Leave it on the hive until thoroughly ripened, then extract and keep sealed up from the air.—W. Z. HUTCHINSON.

1. I think it can. 2. Take well-ripened honey, extract it, and seal it up at once. If it is exposed to the atmosphere for any length of time, it will lose its fine flavor.—H. D. CUTTING.

1. Yes. 2. Extract it as it is sold, and not as it is gathered. That is some more buncombe, some may say.—C. W. DAYTON.

1. I think it might. 2. I do not think I can answer this, and those who can, will, I think, need more room than they have in this department.—C. C. MILLER.

Some say no; we say yes. Extract when the crop is ripe, and treat it as you would comb honey. If it granulates you may melt it over water. Extracted honey sometimes ferments, but some comb honey does too.—DADANT & SON.

1. I think so without doubt. 2. The honey should not be taken until it is thoroughly evaporated and sealed. Pass it through a cheese-cloth as it runs from the extractor, and let it have the air long enough for the imprisoned air to escape, and then close the vessel tightly and keep it in a dry place. I have samples of honey—ex-

cepting one or two years—running back to 1877, and every sample is well preserved. I have found by 8 years' experience, that the word "extracted," as applied to liquid honey, has damaged my trade in the article severely. In all these years I have failed to teach my nearest neighbors to adopt the misnomer. I have given it up in despair, and now call it *liquid honey*.—G. W. DEMAREE.

1. Yes. 2. Extract it after it is sealed over and fully ripened; then put it into kegs or small packages for the market.—THE EDITOR.

Frames for Extracting.

Query 416.—1. When the standard Langstroth hive is used for producing extracted honey, is it best to use full-depth second-stories or shallow supers on the tiering-up plan? 2. How deep should the frames for the latter be? 3. What thickness should the top and bottom bars be to prevent sagging?—New Jersey.

I use full-depth Gallup frames with 9-32 of an inch thick top-bar.—G. M. DOOLITTLE.

1. Full depth. 2. I use reversible frames with $\frac{1}{2}$ -inch top-bars.—A. J. COOK.

1. I see no advantage in shallow extracting stories, except the pleasure (?) of extracting twice instead of once.—C. W. DAYTON.

Both the standard Langstroth frame and a shallow $4\frac{1}{2}$ -inch frame on the tiering-up plan work well. I prefer the latter. The top-bar is $\frac{3}{8}$ -inch, and the bottom-bar $\frac{1}{4}$ -inch.—J. P. H. BROWN.

1. I should prefer shallow supers, and work them on the tiering-up plan. 2. From 5 to 7 inches. 3. The top and bottom bars should be $\frac{3}{8}$ of an inch to prevent all sagging.—G. L. TINKER.

1 and 2. In the early honey harvest I prefer a frame about 5 inches deep to start tiering-up. 3. The top-bars should be $\frac{3}{8}$ -inch; bottom-bars, $\frac{1}{2}$ -inch. If you use wired frames, make the bottom-bars $\frac{1}{4}$ -inch.—H. D. CUTTING.

1. I prefer full-sized frames. 2. The regular Langstroth frames are $9\frac{1}{2}$ inches deep inside. 3. I use wired frames with centre support, and find 3-16-inch top-bars and $\frac{1}{8}$ -inch bottom-bars sufficient.—J. E. POND.

After trying both styles largely, we much prefer a half-story super. We make the upper frames 6 inches deep; two such stories hold more honey than one full story, and are more easily handled. We make top-bars $\frac{3}{8}$ -inch thick, and bottom-bars $\frac{3}{8}$.—DADANT & SON.

1. Perhaps locality has something to do with these things. I have used both the half depth and full size Langstroth frames for taking liquid honey since 1879, and the shallow frames on the tiering-up plan has given me the best results. My half-depth frames are $4\frac{1}{2} \times 17\frac{1}{2}$ inches, the length being the same as the standard Langstroth frame. They are adjusted in cases the same size of the top of the brood-chamber, and are just bee-space

deeper than the frames, viz: $5\frac{1}{4}$ inches deep, and are made so as to be interchangeable. For taking liquid honey the frames should be worked $1\frac{1}{2}$ inches apart from centre to centre, and must be fixed in the case so that the cases can be handled without the frames becoming misplaced. 2. When foundation is used in full sheets, $\frac{1}{4}$ -inch will answer for the top and bottom bars.—G. W. DEMAREE.

The shallow frames undoubtedly possess some advantages in this direction, but whether they are of sufficient weight to warrant their adoption for this purpose alone, I cannot say. I would suggest that the shallow frames be one-half the depth of the Langstroth frame, or a trifle deeper, and that the top and bottom bars be a good, plump 5-16 of an inch.—W. Z. HUTCHINSON.

1. Having used both for 16 years, I have the advantages and disadvantages between full and half depth frames to be about equal. Considering the important feature of uniformity, I have lately used and would advise full depth. 3. Every thing depends. Do you use full sheets of foundation or not. Do you wire the frames or not? Do you use metal standards or not? Do you make the frames of pine or poplar?—JAMES HEDDON.

Use full-sized Langstroth frames. The top-bars should be V-shaped, and cut out of inch lumber; then all danger of sagging will be avoided.—THE EDITOR.

Winter Repository for Bees.

Query 417.—Suppose an earth-roofed cave, half under and half above ground, frost-proof, well drained, well sub-earth ventilated, containing a trough holding 2 barrels of water, into which, and from which, by a sub-earth pipe passes 4 or 5 barrels of fresh water every morning and evening, from a well (the temperature of which water is 46 degrees Fahr.) 1. Would such a cave be a good winter repository for bees? 2. Will the trough of water be a benefit or an injury to the bees? 3. How many colonies will be safe in such a cave, the dimensions being 10x15 feet, and an average of 6 feet high?—S. Central Ills.

I see no great objections to such a repository. 3. From 50 to 75 colonies.—J. P. H. BROWN.

If the walls are dry, and you can give ventilation when needed, you can safely winter in it 150 colonies, or as many as it will conveniently hold.—DADANT & SON.

1. Yes, if the temperature was maintained at 44°, and the hives ventilated at the top. 2. Neither. 3. According to my experiments in even temperatures, 500 colonies.—C. W. DAYTON.

1. Yes. 2. I should say it would be a benefit by keeping an even temperature, if nothing more. 3. As many as it will conveniently hold.—G. M. DOOLITTLE.

1. I think it would be a good repository for bees. 2. The water would be a benefit; it will absorb impurities which would be carried out with the water.—H. D. CUTTING.

1. It would depend upon the temperature maintained in the cave,

whether it was a good place to winter bees. I think with fresh water flowing through it, a higher temperature would be required than in a dry cave. 2. I think the water would be a benefit if it kept the temperature at 45° and above. 3. If the conditions were right, you could not get in too many. —G. L. TINKER.

1. Yes, I think it would. 2. It may serve to equalize the temperature; it would have no other beneficial effect. 3. As many as can be stored comfortably. The above is theory with myself drawn from reading experiments of others; I have never wintered bees save on summer stands. —Jos. E. POND.

I think it would be a good winter repository for bees, and that the water would be beneficial. I have had no experience with very large numbers of colonies in cellars; but I should think this size of cellar would answer for from 100 to 150 colonies. —W. Z. HUTCHINSON.

1. I should guess it would be an excellent place, but you can tell better by trying. 2. Perhaps a benefit. 3. If it is really well ventilated, it is possible that it might bring through in good condition all it would hold; 150 colonies ought certainly to winter in it well, and a less number would probably do still better. —C. C. MILLER.

1. I should say capital. 2. Yes, because it will aid materially to control the temperature. 3. Just as many as you can get in, providing you can keep the temperature at 45° Fahr., in the coldest weather, which I believe would be possible with such an arrangement. —A. J. COOK.

1. If the temperature be kept at about 45° Fahr., the cave will no doubt answer well. 2. The water would be beneficial in equalizing the temperature. 3. It will do to comfortably all it. —THE EDITOR.

Convention Notices.

☛ The next meeting of the Darke County Union Bee-Keepers' Society will be held at Greenville, O., on Friday, May 27, 1887.
J. A. ROE, Asst. Sec.

☛ The next meeting of the West Lake Shore Central Bee-Keepers' Association will be held on May 28, 1887, in Koekring Hall, at Kiel, Wis.
FERD ZASTROW, Sec.

☛ The May meeting of the Northwestern Illinois and Southwestern Wisconsin Bee-Keepers' Association will be held at Rockton, Ills., on Tuesday, May 24, 1887.
D. A. FULLER, Sec.

The New York World says that many a dealer who places a \$10 advertisement in his village paper begrudges his investment when it is worth double to him what he pays for it. Advertising rates in city newspapers would astonish such business men. One column in the Chicago Tribune costs the advertiser \$28,000 per annum. The New York Herald receives for its lowest price column \$39,502, and for its highest price \$63,800. The New York Tribune for the lowest, \$39,754, and for the highest price \$85,648, and these papers never lack for advertisements to fill their columns.

Correspondence.

This mark ⊙ indicates that the apiarist is located near the center of the State named; ⊕ north of the center; ⊖ south; ⊙ east; ⊙ west; and this ⊙ northeast; ⊙ northwest; ⊙ southeast; and ⊙ southwest of the center of the State mentioned.

For the American Bee Journal.

Legislation on Priority of Location.

WM. F. CLARKE.

On page 251, under the side-heading, "Where is it found?" Dr. C. C. Miller writes: "On page 218, in the address of Rev. W. F. Clarke, occurs the following statement: 'It is proposed by some to pass a law securing to the first-comer as a bee-keeper into a neighborhood, the exclusive ownership of the bee-forage within certain limits!' Will Mr. Clarke kindly give the names of some who have made such a proposition, and also the place, if any, where it has been mentioned in any of the bee-papers?"

A civil question is entitled to a civil answer, and I shall do my best to give it frankly and fully. In my reference to "some," I had more particularly in view Dr. Miller himself, Mr. Heddon, and Mr. Betsinger. At the outset of the discussion, Dr. Miller was generally understood to advocate legislative protection to "the first-comer as a bee-keeper into a neighborhood." Mr. Heddon hailed his utterances at the Indianapolis convention as harmonious with those previously made by himself in favor of priority of location, but did not agree with the Doctor in trying to secure it by legislation. After the discussion had been going on for some months, Mr. Heddon, on page 138, withdrew his contention with some facetious hits at the Doctor, and said, "I give him the case for the present at least." Mr. Betsinger, who was at first inclined to oppose the Doctor's views, announced himself as a convert to them, on page 105. I reply, therefore, that all three of these gentlemen have advocated the proposition mentioned in my address, and, as requested, I will now proceed to cite quotations from the "place" where they have done so, viz: in the AMERICAN BEE JOURNAL.

The Doctor first aired his pet scheme of legislative protection for bee-keepers at the Indianapolis convention in October last. There was no verbatim report of his remarks in advocacy of the movement, and I will not pretend to quote him, but the impression made on my mind and on the minds of others was, that he wished legislative recognition of a right of pre-emption to territory in which to keep bees. Thus Mr. Heddon understood him. He says in the AMERICAN BEE JOURNAL for 1886, on page 709: "Only a few months ago I wrote on the subject of 'priority-right of location,' trying to show why

the prior occupant had the natural exclusive right... Surely, none have forgotten how malignantly my position was attacked.... Imagine my surprise at noting that at the Indianapolis convention a committee was appointed to inquire into the desirability and feasibility of asking our Government to legislate this condition of affairs."

In the same volume, on page 743, Dr. Miller thanks Mr. Heddon for giving his view on page 709, and substantially endorses it. He says: "I understand Mr. Heddon to claim that the prior occupant has a natural exclusive right, and that such exclusive possession would result in the greatest good to the greatest number. In this we are very nearly, if not altogether in accord;" and he goes on to specify as the point in regard to which they are not quite in accord, Mr. Heddon's "idea of a natural exclusive right of the prior occupant" securing of itself "the survival of the fittest." Instead of leaving the result to the operation of natural law, the Doctor would secure it by legislation. He says further: "However much thought Mr. Heddon may have given to the matter of rights as to 'priority of location,' I cannot believe he has given much thought to it with the possibility of legislation in view, but it seems to me that without much thought upon this branch of the subject, he has hastily settled upon the conclusion that because there was no legislation there could be none, etc." No legislation on what? "Rights as to priority of location" is the Doctor's own statement of the case, which Mr. Heddon would leave to the operation of natural forces, but which Dr. Miller would have regulated by law.

In the AMERICAN BEE JOURNAL for 1886, page 775, Mr. Heddon replying to the Doctor, contends that the "natural right of priority" is competent to take care of itself without such legislative aid as Dr. Miller proposes. On page 794 of the same volume, Mr. W. H. Osborne urges the following valid and strong objection to the Doctor's position: "There are persons in this village who have kept bees longer than I have, and if by reason of priority, I must surrender the business to them, such legislation might seem more desirable to them than to me."

In the AMERICAN BEE JOURNAL of Dec. 22, 1886, Mr. C. G. Beitel says: "Again, when we scan closely a law such as is contemplated, we cannot fail to perceive what a source of litigation it might prove. The question of priority of location would often be as difficult to establish as that of priority of invention, etc." In the present volume, on page 57, Mr. J. E. Pond, under the heading, "Legislation for Bee-Keepers," and evidently discussing Dr. Miller's proposition, says: "The question of priority of location of an apiary is one on which my views are so well known, that I need not, neither do I care to discuss it; but the question of legislation on that subject is one on which more light is needed, and for that reason

may have a small share of attention." In that issue of the AMERICAN BEE JOURNAL, Dr. Miller for the first time disclaims the priority idea, saying: "And now it is Mr. L. N. Tongue, on page 24, who sets up the priority question in order to knock it down. Has Mr. Tongue not yet found out that nobody ever asked for, or hinted at wanting legislation on the priority question?" I read that with amazement, but not being in the controversy, I did not care to bring the Doctor up with a sharp turn by quoting his previous utterances, and pointing out the drift of the discussion as I have now done.

On page 69, present volume, there is a long article of the Doctor's probably written before the brief reference to Mr. Tongue in the previous number. It is mainly in reply to Mr. Heddon, and mentions "priority of location" several times without any disclaimer of it as part of his scheme. He even says, "In the generality of cases I believe in the priority right." Further, in replying to Mr. Heddon's remark, that "priority of location gives one a natural right, *provided he is fit to hold that location*," the Doctor proceeds to argue again against the natural "survival of the fittest," and pleads for legislation for the sake of those who try to crowd in but cannot, and are involved in loss by their futile attempt, which, he says, might have been prevented if the first comer could have said: "This territory I hold in fee simple as my own, and you must go elsewhere if you want to keep bees." Still arguing along the priority line at considerable length, the Doctor winds up by asking, "On all accounts, then, should not every man have a legal right to his own ground?"

On page 154, Mr. G. M. Alves thus defines the question at issue: "Mr. Heddon thinks that the claims of 'priority of location' are right in morals, but doubts whether legislative bodies could be induced to enact a law for the enforcement of the same. Dr. Miller not only accepts the principle as right, but goes further, and gives it as his opinion that it would be practicable to make it statutory."

On page 199, Dr. Miller is "aroused." He is replying to Mr. J. E. Pond, and asks that gentleman to name "a single person who has ever advised, requested, or desired any legislation on 'priority'." Getting still more "aroused," he says, "Why it is that everybody tacks on 'priority,' I cannot imagine." Again, as if fearful he has not been emphatic enough, he says, "Allow me to impress the fact that so far as I know, no one has ever advocated obtaining legislation in favor of 'priority of location.'"

I am forcibly reminded of an incident of my juvenile days. Our school was in a second story, and the stairway leading to it had a pair of banisters. One day some of the boys played a dirty trick on the master. They smeared the banisters with some filth, and seated serenely in the school-room, awaited his arrival. Just as they expected, he had run his hands along the banisters as he came

up-stairs, and got them sadly daubed. He hastened to his desk, and offered a reward of half-a-crown to any boy who would tell him "who had hands in this." A boy volunteered the desired information, and gave it by saying, "Please, sir, you had hands in it."

I am at a loss to know why Dr. Miller should wax so warm in his tardy disclaimers of the priority idea. As Mr. Pond very justly says, on page 233, "I cannot see how the question of legislation, as desired by Dr. Miller, can be divided from that of priority."

Guelph, Ont.

For the American Bee Journal.

Wabash County, Ind., Convention.

The Wabash County, Ind., Bee-Keepers' Association met at the G. A. R. Hall, at North Manchester, Ind., on April 20, 1887. The meeting was called to order by the Secretary. The President and Vice-President being absent, J. C. Zimmerman, of Wabash, was chosen President *pro tem*.

The reading of the minutes of the previous meeting was heard and approved, after which a discussion followed on "When should sections be placed on the hives?" Messrs. Martin, Whitlow, Miller, Comstock and Zimmerman all agreed that they should be put on as soon as honey begins to come in; Mr. Singer would not put them on too soon, on account of too great loss of heat from a colony.

"Can the pure fertilization of queens take place by drones from a miss-mated Italian queen?" It was decided that they could.

The following questions were taken up in order and discussed: "Which is the most profitable, comb or extracted honey?" "Can a man who runs his apiary for honey, combine it profitably with queen-rearing or vice versa?" "Is spring feeding to stimulate rapid breeding profitable?" (No.) "How can we keep our bees from bothering our neighbors?" (It was decided that there is no trouble when only a few colonies are kept.) "Is it necessary to have bee-space between the cases?" "How do you prevent robbing?"

The following essays were read: Aaron Singer: "Do gentle bees gather as much honey as ill-tempered ones?" "What sized packages sell the best?" "When should we transfer?" J. J. Martin: "How do you get your bees to work in the sections where you want them to?" The following resolution was then passed:

Resolved, That this convention consider the Italian bees superior for all purposes, and each member endeavor to Italianize his apiary as rapidly as possible.

The following officers were elected for the ensuing year: J. J. Martin, President; Alex. Hess, Vice-President; F. S. Comstock, Secretary; and H. C. Whitlow, Treasurer.

The next meeting is to be held in Wabash next fall, the time to be decided by the executive committee.

F. S. COMSTOCK, Sec.

Read at the Wisconsin State Convention.

Honey Adapted to the Human System.

DR. J. W. VANCE.

The subject of honey ought to be of interest to the agriculturist, knowing as he does, that every flower which blooms on his farm and along the highway yields its delicious nectar to the busy bee that, with tireless wing, flits from flower to flower in quest of its food. From every meadow, orchard and forest the summer-wind bears away countless tons of this precious product that ought to be gathered for the good of mankind.

It is not of the importance of bee-keeping as a pursuit, or the progress of bee-culture, that I wish to descant, but rather to say a few words about honey—to speak of its constituents, and its perfect adaptation to the wants of the human system, and of its superiority as a saccharine product to all other sweets in common use.

Although honey has a very ancient history, both sacred and profane, having been in use from time immemorial, its praises sung by inspired and uninspired poets, yet in modern times it has fallen into comparative disuse, perhaps on account of the competition of cane and grape sugars, and syrups made from them. The use of honey has almost become a lost art. It seems to be regarded by most people as a luxury only, and seldom appears on the table except on great occasions. Away back in the annals of time, our ancestors used it as a common article of food, and in cooking.

Honey is a physiological sweet; in other words its constituents are such that it is absorbed into the blood without undergoing chemical change. Such is not the fact with regard to sugar. Sugar is indigestible, or rather not as susceptible of absorption and assimilation as honey, but it requires the action of the gastric juice to split or invert its elements, the muriatic acid element of the gastric juice being the chief agent in this chemical transportation. This change produces what is termed in chemistry dextrose and levulose. I presume this explanation does not convey a very clear or definite idea of the nature of these products, for the names applied only indicate how they affect polarized light. After this change occurs, absorption takes place. If in any way it is hindered, or, on account of an excess of sugar above the capacity of the gastric juice to transform, there remains a residue, the result is decomposition into elements that irritate and inflame the mucus membrane of the intestinal canal, producing a list of ailments too numerous to mention here. Think of the legions of little ones who have been the victims of their universal fondness for sweets, and who so frequently suffer from gastric troubles which are, in a large degree, the result of sugar indigestion. How many, many children have perished from eating candy!

The importance of sugar as an element of food may be inferred from the large proportion of the elements of our food which is transformed by the action of the digestive organs, into the constituents of sugar. Consider the proportions of bread, potatoes and vegetables that we consume daily, all of which must undergo this saccharine change before they are suitable to be appropriated by the human system; it may give an approximate idea of the amount of these elements that are required to nourish our bodies.

If, therefore, the saccharine comprises so large a part of the elements of our food, does it not become an important question as to what form of sweet is the most appropriate and healthful for the nutrition of the human body? For the reasons I shall hereafter enumerate, it seems to me that you will agree with me that honey is the most important and the most healthful, because it is absorbed into the system without change, and, because, unlike sugars, it does not easily undergo fermentation. The formic acid which is an ingredient of honey, prevents chemical change and the morbid processes arising from decomposition of sugar.

Let me repeat the points of difference in ordinary sugars and syrups, and their comparative inferiority to honey as a saccharine food: Honey is an inverted sugar consisting of levulose (fruit-sugar) and dextrose (starch-sugar) and readily absorbed into the system without being acted upon by the gastric juice. Sugar and syrup require the action of the gastric juice, converting, or as it is expressed in chemical language, inverting it into dextrose and levulose, before it is susceptible of absorption and assimilation in the blood. When thus acted upon by the digestive organs, it is assimilable, but in case of weakness of digestion, this action does not occur, and decomposition is sure to follow. Honey is not only a delicious form of sweet, but is a very healthful and nutritious form of food. It aids the natural functions of the alimentary canal. It is recommended, by those who have thus used it, as a refreshing drink, diluted with water in the proportion of from 2 to 5 per cent.

As a remedy for croup and sore throat, it is quite efficient. It is highly useful as a vehicle in the administration of medicine in the treatment of diseases of the mouth and pharynx, in the form of a gargle.

It would require too much time and space to enumerate the many valuable uses to which honey is adapted in medicine and surgery, as well as a most nutritious and healthful food. If these hints may tend in even a small degree toward bringing back into general use that sweet which comprises so large a part of the food of our remote ancestors, I shall be glad. Let us hope the people of our country will recognize the presence of such a perfect natural product, as will induce them to make a larger use of it as a food as well as a luxury.

Madison, Q. Wis.

For the American Bee Journal.

Alfalfa as a Honey-Plant.

W. L. PORTER.

On page 248, Mr. A. J. Foss refers to the proceedings of the Colorado bee-keepers' convention of last March. The report referred to was one taken from the Denver daily papers. I did not have the pleasure to be present at the meeting, but it was evident that the reporter aimed to make something very pleasant to read—something like "Wiley's pleasantry." While we have many ladies in Colorado who are engaged in bee-keeping (and they deserve to be complimented highly), still they are not in the majority, and not the most extensive apiarists in the State.

I am in one of the greatest alfalfa sections in the State, and I have made bee-keeping a business here for the past six years, yet I must say that I am not able to declare alfalfa a honey-plant of any note. I have observed with my best observing powers, since I have been here, to ascertain the value of alfalfa as a bee-forage, and as yet I am not able to sing its praises; and if a person would exhibit a pound of honey and call it pure alfalfa honey, it would be exclusive evidence that he was not an "observer," or did it for "pleasantry."

There is no time in the season when alfalfa is in bloom, that other flowers do not figure largely as honey-plants. The latter part of June, when the first cutting of alfalfa blooms, there is an abundance of Colorado-mint on which the bloom lasts about four weeks, and it produces an abundance of beautiful white honey; raspberry is also in bloom at this time. At the time the second and third crops bloom, there is an abundance of cleome, and it is certainly from this that we get our greatest yield.

When we have the mint in abundance, it is rare to find a bee on alfalfa; the same is true when we have cleome and other valuable plants in bloom. The bees seem to take alfalfa as a make-shift—work on it when they can find nothing better. There are times when the bees fairly swarm on the alfalfa, but it has been my experience that when they are working the strongest on it, they are at a standstill in the sections.

One great draw-back with the alfalfa—if it is a honey-plant—is that when raised for hay, it is cut as soon as the first bloom opens. When farmers leave it to get a crop of seed, it gives the best chance for honey, and it might be that the latter part of the bloom is richer in nectar; but on this I have not had a fair chance to observe. Since I came to the State I have produced over 25,000 pounds of honey, and I never have had an ounce that I could call alfalfa honey. I can recognize the mint, cleome, raspberry, and certainly the rosin-weed; but what alfalfa is like, I have not yet learned.

Two years ago I read an article in the BEE JOURNAL, from one of Colorado's most flowery writers, setting forth the great honey-resources of the State. He said that the cactus was one of the best of honey-plants, from which the most of our honey was gathered. There are many hundred acres of the cactus within a mile of my apiary, and it is a beautiful sight to see it in bloom; but I never have seen a bee either gathering honey or pollen from it. It is evident that the writer pictured vividly in his imagination. He perhaps thought from its abundance, beauty, fragrance and uselessness, that it ought to be a honey-plant! Perhaps this is the way the conclusions about alfalfa have been obtained. I am not prejudiced against it, for it certainly will produce more hay to the acre than any other plant, and I should be glad to be convinced that it is the greatest honey-plant. But the foregoing is my sincere observations.

Greeley, Q. Colo.

For the American Bee Journal.

Hiving Swarms—Building Drone-Comb

G. M. ALVES.

Mr. Hutchinson's book, entitled "The Production of Comb Honey," I have read with very much interest. The clearness with which the author states his ideas, together with his enthusiasm, raises his performance at times to some considerable degree of brilliancy. A work of this kind, coming from a man practical in details, as Mr. Hutchinson undoubtedly is, never fails to strongly interest.

Upon the last page, the reader is freely invited to candid criticism. I wish here to take advantage of this frank invitation.

The central idea of the little book is "hiving swarms on empty frames." Mr. Hutchinson's arguments in this direction, are given with such vigor and clearness, and the facts upon which they are based are so abundant and so strongly vouched for by him, that I feel compelled to accept his conclusions, provided along with them it is insisted that the swarms should be in a normal condition, i. e., that they should be natural ones, or if "made up," they should satisfy the general conditions of natural ones. My observations are, that a "made-up" swarm indiscriminately treated in this manner, will as a rule give unsatisfactory results. I take it that Mr. Hutchinson intends this treatment only for natural swarms, but he does not plainly make this distinction, and hence the novice might conclude that if it was well for a natural swarm, it would be equally well for one "made up." The gist of my objection to treating "made up" swarms indiscriminately in this manner, will appear in a discussion of his observations to be found upon page 33 of his book. He raises the question *why* bees build drone-comb, and then answers: "I believe they always are actuated by one of two rea-

sons, viz., to rear drones in it, or to enable them to store honey more rapidly."

I hope it will not be considered hypercritical when objection is raised both to the form of the question, as well as the answer given. *Why* bees do any given thing, would seem to pre-suppose a power of reason and volition which they by no means possess, and I have not found that bees construct much drone-comb "to store honey more rapidly" when conditions are normal.

It seems to me preferable to put the question in this form: Under what conditions do bees build drone-comb? To which I would answer: When drones are likely to be needed, and when during a honey-flow queens are inactive, either from superannuation or from being in a recuperative state. My observations have been so numerous, and the results have been so uniform, I accept it as a natural law, that bees with a queen in a prolific state, are impelled to construct little drone-comb, and with a queen in an unprolific state (it matters not how fruitful she may be normally) will be impelled to construct a considerable amount.

I have always found that for a certain time previous to casting the first swarm, the queen becomes quite unprolific, and remains so until the swarm issues, by which time she has recuperated, and then again becomes prolific. I have noticed this so repeatedly, and it is so in accord with similar phenomena in natural history, that I would much question the accuracy of any observations to the contrary. Therefore, in using Mr. Hutchinson's method when dividing for increase is resorted to, great precaution should be taken that the queen should not be in or near her resting state; and we are very liable to get such an one in the old way of dividing or driving just before the season of natural swarming. In dividing colonies for increase it would seem that the only proper way of using this method would be in employing only young prolific queens.

In a merely scientific point of view, there are some passages scattered through the book, besides the one already pointed out, that are inaccurate and tend to indefinite ideas. For instance, after mentioning the fact that when an empty frame was inserted in the centre of certain colonies before swarming, it was filled mostly with drone-comb and drone-brood, whereas after swarming the same queens and bees when hived upon empty frames, filled them with worker comb and brood. The reason for their different action is then given as follows: "Before they swarmed the bees knew that drones must be provided for the fecundation of the young queens, etc." Now we may not attribute to bees such power of reasoning, nor may we conclude that they are not impelled by laws over which they have no control, and in which they have no volition.

The fact is, the bee is but a product of natural law. In the first instance, the colonies were in a state of more

or less inactivity, in which if the queen laid at all, she must deposit mostly drone eggs, which even the workers are at times able to do. In the second instance, recuperation had been accomplished, and the queen and all were impelled to active duty. In both instances the queen and her bees were merely the *subjects* of natural laws; and because these laws of rest and activity are beneficent in all directions to the perpetuation and well-being of the bees, we are not allowed to conclude that the bees themselves do any intellectual planning, but rather that their *very existence* is only to be accounted for by the fact that they are the merely passive subjects of these (to them) impelling and immutable natural laws.

However, as before said, the book is filled with contagious enthusiasm and pointed suggestions, and I hope all will read it. It will certainly be to their interest to do so.

Henderson, Mo. Ky.

For the American Bee Journal.

Hives for Comb Honey.

J. H. ANDRE.

During the season of 1896-97 I described a new hive; I still think now, more than I did then, that it was the hive for comb honey and for wintering bees, but one objection is its cost, and another is its difficulties in manipulating its frames. One reason that I made it was, I did not like a large frame, and also I thought if the frames were deep enough to contain honey in the tops all of the time, the bees would enter the sections quicker than they would from dry combs, and the sections would be cleaner than they would be if they run across old black comb. In both of these I believe I am correct, but taken all in all, cost and everything into consideration, I would not advise any one to try them, as I wish to be fair, and not mislead in the pursuit of bee-keeping.

I had not decided until a day or two ago to throw them aside, but while cleaning out a hive that the bees died in the past winter, I saw that their objections over-balanced their good points.

I shall use a hive in the future 14x17 inches, Simplicity depth, frames crosswise, two 6-inch entrances on the side (cut out of side instead of bottom), case of 32 sections, no division but to rest on strips, and if it troubles to remove the case entire, I will remove the sections. With a division-board a colony can be hived in one-half the hive as two in one hive. I like a loose bottom, but if I cut the entrance in the side of the hive, and place the frames as high as will be practicable, I think I can clean out the *debris* in the winter, and save something there in the way of clasps, etc.

Bees have gathered but little pollen yet; it is the most backward season for bees that I ever knew.

Lockwood, N. Y.

For the American Bee Journal.

Sections Filled with Comb, etc.

W. Z. HUTCHINSON.

I have just read the article of Mr. Dibbern, on page 264. I fear he does not use the right kind of sections, nor take the proper care of them, as he speaks of their becoming soiled by honey that has leaked out, by dust, bleached by the light, or stained by getting wet.

Basswood sections are easily soiled by any honey that may become daubed upon them, but white poplar is free from this objection. Mr. Dibbern takes Mr. Thielmann sharply to task, as not being a progressive bee-keeper, because he does not use separators; it seems to me that allowing sections of comb to become covered with dust, bleached out by the light, and stained by getting wet, are not exactly signs of progression, but rather of neglect and carelessness. Of course sections treated in such a manner could scarcely be classed as "number one." I always put my unfinished sections into cases in the fall, and pile them up carefully, putting a tight-fitting cover at the top and bottom of each pile, being careful that there is not a crevice left large enough for even a spider to enter; and in the spring they come out just as sweet, clean and fresh as when put away. It is possible that the fall-built combs of some localities are dark or yellow, but such is not the case here. Of course dark combs ought not to be used for white honey.

Mr. D. says: "In an apiary that is run upon correct principles, there will be few or no combs built during the white honey harvest to carry over to another year to be refilled." Of course if the bees are crowded near the close of the honey harvest, a greater proportion of combs will be finished, but I have never found it profitable to do this, especially as I find empty combs so valuable in the spring.

In regard to getting the combs cleaned up: There is no necessity for putting the sections on the hives and leaving them until the weather is so cool that there is difficulty in removing them. They may be placed upon the hives in the forepart of a pleasant day, and will be ready for removal before night. If left upon the hives several days, the first pleasant day should be improved by their removal. The bees may be gotten out of the cases in the same manner as from cases of honey. Smoke as many bees as possible down into the hive, then remove the case and shake it vigorously in front of the hive, which shaking will dislodge most of the bees, when the case may be carried to the screen-house and placed upon end, where the few stragglers will seek the light and escape. To attempt to perform such operations upon a cool fall day would be folly, but upon warm days, such as *always* come after the close of the honey harvest and before cold weather, it can be managed without any trouble.

There is still another method, viz: that given by Dr. Miller in his book: Pile up the cases of sections out-of-doors, or in some place accessible to the bees, then adjust the cover in such a manner that only one or two bees can pass in or out at once, and the combs will be cleaned up with no further trouble.

THE CAPPINGS OVER HONEY.

It seems to me that Mr. Dadant, on page 267, offers to yield the palm upon peculiar grounds; viz., if I can succeed in evaporating honey to one-half its former bulk, he will admit that the cappings over honey are not impervious. I fail to see how this would be satisfactory proof. I presume that the ground that Mr. Dadant desires to take is this: If honey *cannot* be evaporated one-half, then the "distinguished apiarists" were mistaken. It is quite probable that they did not take the trouble to measure the amount of evaporation; they probably saw that the honey occupied considerably less space, and used the expression "one-half" without intending to be exact. Such expressions are often used, colloquially, in this manner. I believe, though, that Mr. Poppleton did not say "one-half"—he simply said: "The honey in the dry atmosphere will become thicker and occupy less space."

So far as the question under discussion is concerned, it is immaterial whether the honey evaporated to one-half or only nine-tenths of its former bulk.

Rogersville, 6 Mich.

For the American Bee Journal.

How to Market Honey.

W. A. PRYAL.

The following article I wrote for the San Francisco *Chronicle* last August, and thinking that it might be of interest to the readers of the AMERICAN BEE JOURNAL, as the subject of marketing our honey crop is now being discussed, I send it as my contribution on this interesting and important matter. The article is substantially as follows:

"Every year, no matter whether the season has been favorable for a heavy production of honey or not, the same complaint is heard from the bee-keepers—that the prices netted for their product are not sufficient to more than pay expenses. For years the price has been steadily going downward, especially for the extracted article, until it seems now to have reached a point beyond which it is impossible to sink. One desperate apiarist in southern California, who has been netting 2½ cents or less per pound for fine white-sage extracted honey, says that he will ship no more, but has commenced feeding the honey to his hogs, confident that they will fatten readily upon it, and that he can convert them into a choice article of honey-fed bacon. This seems to be the first instance on record where it has been found more profitable to

dispose of so delicious an article in such a manner. The same man is also experimenting by mixing extracted honey in the feed of his cows, and thinks that good results are bound to accrue from such a source.

"It is a great pity that bee-keepers should not receive a fairly remunerative price for their honey, and the whole trouble lies in the fact that people in large cities, like San Francisco, are not educated to its use, and do not have it brought to their attention in such a manner as to lead them to make it a regular portion of their daily diet. It is not necessary here to go into a dissertation upon the subject of the healthfulness of honey as a regular concomitant of the table. From time immemorial this fact has been recognized by writers and physicians.

"Honey enters largely into the preparation of many excellent remedies, particularly those which are adapted to the cure of throat and lung troubles, and many who have cured such affections in their own persons, can testify to the marvelous healing-powers of honey when freely consumed. What is needed is to have the honey—both extracted and comb—brought directly to the attention of house-keepers, especially of the middle and poorer classes, in such shape and at such a price that it will be within the reach of the most limited purse. Even at the low prices complained of by the producers, it is a fact that by the time the honey is offered at retail, the rate asked is such that it is regarded as a luxury, instead of, as should be the case, a common article of diet.

"Extracted honey is the purest and cheapest sweet that is known. It should displace molasses in every household, and may be made to take the place largely of sugar. There are many bee-keepers in this State who do not consume a pound of sugar from one year's end to the other. The better grades of white honey are used in all culinary operations, and even for sweetening coffee and tea, and one cannot detect the difference between food so prepared and that into whose composition the best grades of sugar have entered.

"Many Eastern bee-keepers have solved the problem of a profitable market for their honey by fitting up wagons and making regular trips from door to door in the towns and cities, and as soon as the excellence of their products becomes known, they have no difficulty in disposing of all they can produce at good prices. There is any opening, or rather any number of them, in any large city for such an enterprise. The extracted honey should be carried in a tank, from which it may be drawn in any desired quantity, and the purchaser not be obliged to pay a high price for the glass or tin vessel in which, as is now the case, extracted honey is sold. The comb should be in sections without glass, so that when a person buys honey he gets as little of anything else as possible with it. By offering the honey at such moderate prices as may now be done, and still save a

profit, a great many tons of the article might unquestionably be disposed of in any city at a good profit, and a steady demand thereby created where now not a hundred pounds finds sale in a twelve-month."

North Temescal, Cal.

For the American Bee Journal.

Reports on Wintering Bees.

G. W. DEMAREE.

Mr. Gilliland's statements on page 249, places the question of the natural condition of bees in winter quarters beyond all philosophical argument. Were I to attempt to reply to his "facts," it would be a dead-set case of "tis and 'taint."

The case which he cites, however, of a hive-cover being blown off, must be ruled out, as that was a case of disturbance, not a natural condition. But it happens that I, in the same winter (1885), wintered a large colony without any protection over the tops of the frames, only what a 10-inch super with a flat hive-cover on top of it might be supposed to afford. That colony endured a swoop of 20° below zero in the month of January, 1885, the coldest weather here of which we have any record. When the hive-cover was raised to peep in, the bees could be seen sandwiched between the combs, silent as the dead. They never "roared" until spring-time, and until the proper conditions were present.

My love for the honey-bee has bordered on infatuation for over 40 years, and in all these years when I have kept bees, I have missed the gentle hum of the bees in the winter months. But when spring-time would come, with sunshine and flowers, and the bees would begin to breed up, a joyous "roar" would begin to be heard in the apiary after the day's toil. Every apiarist knows how this state of things gladdens the heart, touched by the spring resurrection. But now Mr. Gilliland reverses the whole thing, and has the bees "roaring" in zero weather, and silent when the "sun warms things up." This difference in matters susceptible of proof, must be settled, if at all, by the preponderance of the evidence, and I propose, the Editor concurring, that this question in bee-science be settled in that way. I will suggest that all bee-keepers who feel inclined to do so, write on a postal card, addressed to the AMERICAN BEE JOURNAL, in substance like the following, according to the facts and their experience:

BLOOMFIELD, Ind., April, 1887.

I wintered my bees on the summer stands, protected and unprotected. At a temperature of zero and lower the bees "roar" until they can be heard "10 feet from a hive."—JOHN C. GILLILAND.

CHRISTIANSBURG, Ky., April, 1887.

I wintered my bees on single-walled hives, on the summer stands. When the temperature approaches zero, or goes below, no sound issues from the hives, if the bees are in good health.—G. W. DEMAREE.

If a great number of such reports should be sent in, they could be con-

densed and put in tabular form so as to occupy but little room. Who would not like to see the result? Let us have the evidence.

Christiansburg, 3 Ky.

Western Plowman.

Apicultural Notes for May.

C. H. DIBBERN.

Of all the months of the year May is perhaps the most important to the successful apiarist. Of course this statement would apply to April in the States south of "Mason and Dixon's line." It is yet too early to expect to secure much surplus honey, and I find it more profitable to direct all my energies to building up my colonies to a uniform, strong condition. If the bees are worked for extracted honey, some extracting may be done to advantage during fruit bloom; but for comb honey, I do not think it desirable to greatly increase the bee space. Then, too, honey stored so early in the sections is somewhat dark, and in my locality not much can be secured, and that only by the use of ready-built combs, which I have not found desirable. Such combs will, generally, only be partly filled, if touched at all, in patches and sealed over rather dark, to be finished later, during the white clover harvest, thus securing only second grade honey at best.

A better plan for the bee-keeper to pursue is, to equalize his colonies, by taking a comb of brood or two of such colonies as would store a little honey, and give them to such as would otherwise not build up sufficiently to store any surplus during the white honey harvest. After all the equalizing has been done that is practicable, some colonies will be found that are not up to the standard, and in such cases, the best way is to confine the bees to only as many combs as they will cover, taking the surplus combs away and contracting the space by division-boards. As the bees increase and more space is needed, give them an empty comb or two, and place them near the centre of the brood-nest. If there should be a lack of honey, a full comb may be given by placing it at the side of the brood-cluster. Of course a great deal of judgment must be used in doing this kind of work. It is not best to be forever breaking the hives open and disturbing the bees in cold weather; neither is it advisable to open the hives when there is no honey coming in, and thus induce robbing. If hives must be opened at such times, do it in the evening when but few bees are flying, and stop as soon as many robber bees appear. There is no necessity to be forever opening hives and exposing honey to robber bees. The experienced bee-keeper is able to look through an apiary of hundreds of colonies when the bees are flying, and by simply watching the movements of the bees, almost invariably can tell the exact condition of every hive.

Right here a novice is often misled. I was once called to see a very

strong colony, that was supposed to be gathering honey at a fearful rate. Of course I recognized the shrill sound of the robber bee long before I came near the hive. There was quite a falling in the hopes of the bee-keeper when I told him that instead of his bees gathering honey, about all the bees in town were carrying it away.

Another case I remember: I was called to see a colony where there seemed to be plenty of bees, but were lazy, as they were clustered about the entrance doing nothing, while other colonies were piling over each other carrying in honey and pollen. When I told the owner that about all the bees in that hive were at the entrance, and that the colony was queenless, he seemed incredulous. Upon opening the hive, however, I soon satisfied him that I was right.

The bee-keeper should ever remember that he cannot expect a large honey crop without plenty of bees to gather it. In this locality, May is the month that we want to produce bees by the millions, as they are the ones that will gather the honey in June and July. Everything should be done that can be done this month to build up every colony strong in bees, and next month will be the time to work for all the honey that can be secured. If we have the bees at the right time, and the season is at all favorable, and we attend to the necessary work of placing on the surplus arrangements, there need be no fear about getting the honey.

While in this latitude but little swarming need be looked for in May, yet hives should be in readiness, for there will be plenty of other work when swarming-time comes. Indeed all the work that can possibly be done, while the weather is cool, should be attended to now. Sections should be made up, foundation placed in them and put in cases ready to go on the hives. Hives should be neatly painted, as they last much better, and help very much in giving the apiary a pleasing appearance. Everything in the shape of sections, cases or other material likely to be needed during the busy time, should be on hand. If not, order at once, as you cannot always get it at the moment wanted. Remember when you are busy with the bees, supply dealers are doubly so, and disappointment and loss are often the result.

Milan, O. Ills.

For the American Bee Journal.

U. S. Honey-Producers' Association.

W. H. STEWART.

I am decidedly in favor of organizing the proposed "United States Honey-Producers' Association." The truth is, that something must be done that will effectually protect the interests of honey-producers, or they will be compelled to go out of the business. A man may keep a few bees in connection with some other more lucrative business, and be lay-

ing up every year something more than the cost of living from his entire business, and not know whether the production of honey is profitable at the market price or not.

If a bee-keeper is engaged in the rearing of queens, or furnishing bee-keepers' supplies, and having a brisk trade, he may be saving some money, but if he were to leave off all other branches of business, and make the production of honey a specialty, and have to take our present chances for a market, he would find it very hard to support a family in a respectable and comfortable manner.

It will be remembered that I have before stated in this paper that our honey should be handled only by commission men that were approved, or chosen by bee-keepers; and that it would be the business of those commission men to keep well posted as to the market value of honey in all parts of the civilized world; to know what rates of freight could be secured, and that they should keep the bee-papers and bee-keepers posted in the matter; thus enabling us to ship our honey direct to the best markets. These commission men should also have a good understanding with each other, so that a surplus that may be found in one market may be forthwith shipped to another that is not well supplied.

How is it now with the honey market? Not one bee-keeper out of a hundred that ships his honey to the great markets, has ever seen the man to whom the honey is sent. We know not, and have no means of knowing, whether the merchant is responsible or not; or whether he is honorable or dishonest. Again, let us suppose that a merchant reports that my honey is sold at 6 cents per pound. How am I to ever know for a certainty that it was not sold for 10 cents per pound? I can do nothing about it. Yet this is not all. Many a poor, hard-working bee-keeper has shipped away as best he could, his entire crop, and never got one cent in return!

Much has been said about home markets for honey. It is true that a given quantity may be sold at home, but to talk of us all disposing of a good crop near home, is utter nonsense! Honey is mostly produced in the rural districts, and those who use it are mostly in the towns and cities, and the product must be carried to the consumer.

Here in the West is in operation an organization called the "Farmers' Alliance," and farmers here in Dakota can get, at the present date, 7 cents more per bushel for wheat from the "Alliance," than from merchants that are shipping to commission men in the large cities. Farmers that are in want of immediate cash, are allowed to draw a portion of the worth of their crop from a fund kept for that purpose by the "Alliance," and the balance when the wheat is disposed of. This would be a good arrangement with our proposed honey-producers' association.

Some propose to discontinue the publishing of the honey-market re-

ports for commission men of the cities. I would say that if we have our own salesmen in the cities, then no honey would go into the hands of the former commission men, and they would have no reports to publish; but our own salesmen would give us reports that would be valuable.

How easy it is for the present commission men to "put their heads together" and report that extracted honey is worth only 6 cents, and all agree to get all they can from consumers and only report to the producer, "sold at 6 cents!" It is very plain to me that the commission men are now fixing our wages, which is all wrong! and in this, as in all other important matters, the "fittest will survive." If our fraternity has less brains than our present commission men, then we must "perish;" but if we have enough common-sense to do our own business in a proper manner, then we may yet survive.

Kimball, ♀ Dak.

For the American Bee Journal.

Items in Bee-Keeping.

W. H. STOUT.

Some years ago (say six or eight), after reading many "gushing" articles on bee-keeping and its profits, I started in, expecting from the flattering reports to be rich enough to retire in about two seasons; but I was doomed to disappointment, and after the other years added I fail to see that my wealth has increased to any great extent in consequence of keeping bees.

ALSIKE CLOVER FOR HONEY.

But I have it now, as I noticed in some bee-periodical that an acre of Alsike clover will yield 500 pounds of honey in a favorable season. I have now 25 acres seeded with Alsike, which ought to make 12,500 pounds, which, even at the present low prices, ought to net a clean "thousand." I have 40 colonies of bees which contain (by estimate) 15,000 bees each, or 600,000 bees; requiring each one to store only $\frac{1}{2}$ of an ounce, and they must be lazy bees, indeed, that cannot gather above what they need to the extent named.

If this catches the eye of some speculative individual, I wish to state that a liberal discount will be made for cash on the prospective honey crop.

BEE-LEGISLATION.

In regard to bee-legislation, suggestions are made, and some advocate taxing bees and getting them recognized as personal property. In this State we can keep chickens, ducks and geese without being taxed, yet they are recognized as personal property, and why any one should be anxious to pay taxes on bees, when pigs and poultry are free, is not very clear!

HONEY-PRODUCERS' ASSOCIATION.

So also in regard to forming a honey-producers' association; it is

perhaps possible to regulate the price of honey, but scarcely probable, as there are too many to unite for the purpose, and we Pennsylvanians are from principle opposed to combinations, monopolies and pools, since we who are out of them have to pay dearly on coal, coal oil, and other things controlled by such combinations, reaching far into other States, and regulating mainly the prices of necessities, and not luxuries, like honey.

If the articles could be dispensed with, the combinations would soon be "busted;" but honey can be dispensed with, and the prejudices already existing are sufficient, without adding "monopoly" to the weapon of bee-keepers' enemies.

MY LOCAL HONEY MARKET.

Before this year I had the honey market in this vicinity almost to myself, but now the stores are full at low prices, with only little demand, simply because wages are low and business was dull, but shows signs of revival.

As I have no honey to offer, owing to the light crop last year, I let them sell all they can, brought here from other States, but if I succeed in producing any surplus, I mean to have this market, as legitimately mine, and no family shall be missed in canvassing for the sale of my honey when the proper time comes.

By working my home trade I have always succeeded in disposing of my crops at fair prices, and I think I can, by saving commissions and freight, make a little more out of my product than others at a distance.

Pine Grove, ♀ Pa.

For the American Bee Journal.

Swarms Locating a Home.

GEO. POINDEXTER.

When people "go West," some have a home located, and others stop and look around for a home after they arrive.

So it is with bees—some have the home located, and the hollow or hive cleaned up before leaving the parent hive; others leave the hive not knowing where they are going, and fly until they alight on some bush or tree, and then they begin to look for a hollow or hive, sending out spies from the swarm in every direction to discover the most favorable place. There the bees will continue to come until everything is clean; then the main swarm is notified, and all come off the tree and follow the house-cleaners direct to their new home. After the swarm has left the tree, back comes a lot of spies, only to find themselves alone.

Some swarms remain where they alight, and if a home is not found in a short time, being full of honey they start combs, and remain there until Jack Frost drives them into winter quarters.

Kenney, ♀ Ills.

Local Convention Directory.

1887. Time and place of Meeting.

May 13.—Sheboygan County, at Hingham, Wis.
Mattie B. Thomas, Sec., Sheboygan Falls, Wis.

May 24.—N. W. Ills. & S. W. Wis., at Rockton, Ills.
D. A. Fuller, Sec., Cherry Valley, Ills.

May 26.—West Lake Shore Central, at Kiel, Wis.
Ferd Zastrow, Sec., Millhome, Wis.

May 27.—Darke County Union, at Greenville, O.
J. A. Roe, Asst. Sec., Union City, Ind.

Dec. —.—Michigan State, at East Saginaw, Mich.
H. D. Cutting, Sec., Clinton, Mich.

In order to have this table complete, Secretaries are requested to forward full particulars of time and place of future meetings.—ED.

SELECTIONS FROM OUR LETTER BOX

Removing and Renewing Brood-Combs.—Chas. Hill, Mt. Healthy, ♀ O., writes:

I have read the answers to Query, No. 409, but none who answered seem to have used my method of cleansing old brood-combs. It is very simple, and consists only in using them in the second story for extracting combs. Old brood-combs do not yield much wax, but the oldest and blackest combs, after being used for extracting one season, will be as clean and fresh as new ones; and hence there will be no need of having new combs.

The Great Drouth in Texas.—J. M. McDaniel, Peoria, ♀ Tex., on April 25, 1887, says:

Bees have done well here this spring, and the prospects are favorable, provided we can have sufficient rain. The drouth that has prevailed in central and western Texas for the last two years, has been very disastrous to bee-men. We have had some rain lately, which would be sufficient, but for the fact that the drouth has penetrated deep down into the earth. Our chief source for honey is from horse-mint, which was almost a failure last year, and there is a bountiful supply this year. It does not bloom until June.

Compelling a Swarm to Cluster.—Dr. A. B. Mason, Auburndale, ♀ O., writes thus on May 2, 1887:

My bees have been out of the cellar 8 days only, and are in splendid condition, some of the colonies having built quite large pieces of new comb. The last 3 weeks have been quite cold. Yesterday the temperature was 72°, being the warmest day for some time, and the bees had a regular jubilee.

A few days since, a friend was spending the day with me, and asked if I knew of a good way to make a swarm of bees cluster quickly. I told him that I knew of nothing better than to shoot sawdust among them, as told me by H. D. Cutting, of Michi-

gan. He then related the following incident: His father kept bees in Westchester county, N. Y., and 60 or more years ago (when the narrator was about 15 years old) a swarm came out and started to leave, and an older brother shot into it with a shot-gun and it alighted immediately. Two or three days after, the same bees swarmed out of the hive they had been hived in, and circled around, going higher and higher until nearly out of sight. A clap of thunder coming just at that time, the swarm dropped to the ground, alighting within a short distance of the former place of clustering. They were again hived, and in two or three days more they came out again and took a "bee-line" for a house 10 miles away, and went directly into a knot-hole in the side of the house, being the fifth swarm that was seen to go into that knot-hole that summer. The bees occupied the spaces between the chamber floor and the ceiling below. When winter came the floor was taken up, and several barrels of honey were taken out. The foregoing seems like a pretty big story, but I have known the narrator several years, and have never known his word to be doubted.

Losses in Wintering.—H. M. Seeley, Harford, Pa., on April 30, 1887, says:

I had 4 colonies last fall, and have 4 now, 3 strong and 1 weak, the latter being caused by the mice getting into the hive. I have a record of 770 colonies in the fall, of which there are now alive 381 colonies. Some beekeepers lost all they had.

Death of an Old Subscriber, etc.—J. E. Boyles, Nelsonville, O. Ohio, on May 2, 1887, writes:

My father, T. M. Boyles, died last fall, and it leaves me in charge of the bees, with a limited experience. I have sold some, and have 35 colonies now, the most of them being in good condition. Father had kept bees about 40 years, was quite successful, and was without a total loss at any time from the first. He had taken the AMERICAN BEE JOURNAL during nearly the whole time of its existence, and was very fond of both his bees and the JOURNAL.

Bees doing Well, etc.—W. Mason, Fillmore, Ind., on April 28, 1887, says:

A neighbor of mine, who commenced keeping bees two years ago under my supervision and instruction, has been very successful both in summer and winter management. He had a colony in March, during a warm spell, that acted as though it was swarming. On looking at the entrance of the hive, he saw a queen dead, and looking a little longer he found another queen about dead. He returned her to the hive, and the bees returned again. He saw nothing wrong after that, until this week he found no brood or the appearance of

brood, and the colony was somewhat dwindled. He put in two frames of brood and bees, and awaited results. This was a colony that had cast 2 or 3 swarms, consequently the queens were young. Whether they were improperly wintered, or whether it was a case of superseding, and they destroyed both queens, I do not know. Bees are doing well, although the weather is very changeable. We had considerable snow on April 1. Plums and pears are in full bloom, and bees are working hard on them.

No Loss in Wintering.—J. N. Ginn, Brooks, Maine, on April 27, 1887, says:

Spring here is unusually late. The snow is deep in the woods. The roads are a mixture of snow-drifts and mud falling in where the frost goes out. We had fine weather from April 19 to April 23, a few poplars blossoming so bees brought in pollen. Since then the weather has been bad; last night it rained like a flood. My 50 colonies of bees have wintered without the loss of a single colony, in the cellar, and most of them are there yet. I shall put them out as soon as "Old Sol" shows his face.

Working with a Will.—H. J. Rogers, Stanard's Corners, N. Y., on April 28, 1887, writes:

I have kept bees for 5 years, commencing with one colony in a box-hive. Last spring I had 36 colonies, and increased them to 52 during the season. Of these all have wintered finely except two, one of which was queenless last fall, and the other had the diarrhea. I first found sealed brood on April 1. The combs are now well covered with young bees, and the bees are working with a will. I have fed them since March 15, although there was plenty of honey in most of the hives. My surplus crop last season was 2,800 pounds of comb honey. With us the season was dry, and most of the honey came from raspberry in June.

Expecting Early Swarms, etc.—Wm. Ford, Marshalltown, Iowa, on April 30, 1887, writes:

I put 25 colonies into the cellar last fall, and on March 22 I took out 22 strong colonies and one that was weak. The two that died were queenless. The temperature of the cellar ranged from 40° to 45°. All are breeding very rapidly. I spread the brood-nest as directed by G. M. Doolittle, in his pamphlet called "The Hive I Use." My bees carried in the first pollen on April 2. Drones are flying now every day. I expect to have early swarms. The apple blossoms will be out in a day or two. I think we will have a good honey season this year. I am experimenting with a new kind of entrance-block to stop robbing. It works like a charm so far. I will report and give a description of it later.

Encouraging Prospects.—R. B. Woodward, M. D., Somerset, O. Ohio, on April 27, 1887, writes:

All of my 18 colonies of bees wintered finely on the summer stands. I have heard of no losses in this section from persons who follow the modern methods of preparing their bees for winter. I have Italians, Syrians and Cyprians, and I see no difference in their wintering, but the Syrians and Cyprians are rearing brood more rapidly, and have drones flying now. The clover is looking well, and plenty of fruit bloom and locust is near at hand. The prospects are encouraging for an excellent honey crop in this locality.

Honey and Beeswax Market.

The following are our very latest quotations for honey and beeswax:

CHICAGO.

HONEY.—Sellers ask from 7 to 10 cts. for anything off in comb honey; this includes dark undesirable and crooked combs, and 2-pound sections. Good 1-lb. sections, 10@12c.; choice, 12@13c.—**BEESWAX.**—25c. R. A. BURNETT, Mar. 28. 161 South Water St.

DETROIT.

HONEY.—Best white comb, 11@12c. Market is improving. **BEESWAX.**—23c. M. H. HUNT, Bell Branch, Mich. Apr. 11.

SAN FRANCISCO.

HONEY.—We quote: Extracted, white, 4@4 1/2 cts. Comb, white, 7@13c. Market firm. **BEESWAX.**—Scarce at 19@22c. Apr. 4. SCHACHT & LEMCKE, 123-124 Davis St.

CLEVELAND.

HONEY.—Choice white in 1-lb. sections, 12@13c.; second quality, 10@11c.; and buckwheat unsalable at 8@9c. Extracted, 5@6c. **BEESWAX.**—25c. Apr. 20. A. C. KENDEL, 115 Ontario St.

ST. LOUIS.

HONEY.—Choice comb, 10@12c. Strained, in barrels, 3 1/2@4 1/2 c. Extra fancy, 1/4 more than foregoing prices. Extracted, 4 1/2@5c. Market dull. **BEESWAX.**—Steady at 20c. for prime. May 7. D. G. TUTT & CO., Commercial St.

SAN FRANCISCO.

HONEY.—We quote: White comb, 12@14c.; amber, 7@9c. Extracted, white, 4 1/2@5c.; light amber, 3 1/2@4 1/2 c. Market quiet. **BEESWAX.**—19@22c. Apr. 16. O. B. SMITH & CO., 423 Front St.

MILWAUKEE.

HONEY.—We quote: Finest white 1-lb. sections, 12@12 1/2 c.; choice white 1-lbs., 11@12c.; choice 2-lbs., 10@11c.; dark not wanted, and imperfect slow. Extracted, finest white in kegs, 6 1/2@7c.; good white in kegs and barrels, 6@6 1/2 c.; dark, 4 to 4 1/2 c. Demand good and market firm. **BEESWAX.**—25c. May 4. A. V. BISHOP, 142 W. Water St.

BOSTON.

HONEY.—1-lb. packages of white clover honey at 13@15c.; 2-pounds at 11@13c. Extracted, 5@7c. Sales slow. **BEESWAX.**—26 cts. per lb. Apr. 22. BLAKE & RIPLEY, 57 Chatham Street.

CINCINNATI.

HONEY.—We quote for extracted, 3@7c. per lb. Best comb brings 11@14c. per lb. Demand fair. **BEESWAX.**—Good demand, 20@23c. per lb. for good to choice yellow. Apr. 21. C. F. MUTH & SON, Freeman & Central Av.

By Using the Binder made expressly for this BEE JOURNAL, all can have them bound and ready for examination every day in the year. We have reduced the price to 60 cents, postpaid. Subscription for one year and the binder for \$1.50.



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At One Dollar a Year.

ALFRED H. NEWMAN,
BUSINESS MANAGER.

Special Notices.

To Correspondents.—It would save us much trouble, if all would be particular to give their P. O. address and name, when writing to this office. We have several letters (some inclosing money) that have no name; many others having no Post-Office, County or State. Also, if you live near one post-office and get your mail at another, be sure to give the address we have on our list.

Colored Posters for putting up over honey exhibits at Fairs are quite attractive, as well as useful. We have prepared some for the BEE JOURNAL, and will send two or more free of cost to any one who will use them, and try to get up a club.

The Production of Comb Honey, as practiced and advised by W. Z. Hutchinson, can be obtained at this office, for 25 cts.

The Convention History of America with a full report of the proceedings of the Detroit and Indianapolis conventions, and the AMERICAN BEE JOURNAL for one year, will be clubbed for \$1.25.

Sample Copies of the BEE JOURNAL will be sent FREE upon application. Any one intending to get up a club can have sample copies sent to the persons they desire to interview, by sending the names to this office, or we will send them all to the agent.

Red Labels for one-pound pails of honey, size 3x4½ inches.—We have now gotten up a lot of these Labels, and can supply them at the following prices: 100 for \$1.00; 250 for \$1.50; 500 for \$2.00; 1,000 for \$3.00; all with name and address of apiarist printed on them—by mail, postpaid.

As there is Another firm in Chicago by the name of "Newman & Son," we wish our correspondents would write "American Bee Journal" on the envelope when writing to this office. Several letters of ours have already gone to the other firm (a commission house), causing vexatious delay and trouble.

Home Market for Honey.

To create Honey Markets in every village, town and city, wide-awake honey producers should get the Leaflets "Why Eat Honey" (only 50 cents per 100), or else the pamphlets on "Honey as Food and Medicine," and scatter them plentifully, and the result will be a DEMAND for all of their crops at remunerative prices. "Honey as Food and Medicine" are sold at the following prices:

Single copy, 5 cts.; per doz., 40 cts.; per hundred, \$2.50. Five hundred will be sent postpaid for \$10.00; or 1,000 for \$15.00. On orders of 100 or more, we will print, if desired, on the cover-page, "Presented by," etc. (giving the name and address of the bee-keeper who scatters them).

To give away a copy of "Honey as Food and Medicine" to every one who buys a package of honey, will sell lots of it.

System and Success.

All who intend to be systematic in their work in the apiary, should get a copy of the Apiary Register and commence to use it. The prices are reduced, as follows:

For 50 colonies (120 pages).....\$1 00
" 100 colonies (220 pages)..... 1 25
" 200 colonies (420 pages)..... 1 50

The larger ones can be used for a few colonies, give room for an increase of numbers, and still keep the record all together in one book, and are therefore the most desirable.

We will Present Webster's Dictionary (pocket edition), and send it by mail, postpaid, for two subscribers with \$2. It is always useful to have a dictionary at hand to decide as to the spelling of words, and to determine their meaning.

Do you Want a Farm Account Book? We have a few left, and make you a very tempting offer. It contains 166 pages, is printed on writing paper, ruled and bound, and the price is \$3. We will club it and the Weekly BEE JOURNAL for a year and give you both for \$2. If you want it sent by mail, add 20 cents for postage.

Yucca Brushes are employed for removing bees from the combs. They are a soft, vegetable fiber, and do not irritate the bees. As each separate fiber extends the whole length of the handle as well as the brush, they are almost indestructible. When they become sticky with honey, they can be washed, and when dry, are as good as ever. The low price at which they are sold, enables any bee-keeper to have six or more of them, so as to always have one handy. We can supply them at 5 cents each, or 50 cents a dozen; if sent by mail, add 1 cent each for postage.

Should any Subscriber receive this paper any longer than it is desired, or is willing to pay for it, please send us a postal card asking to have it stopped. Be sure to write your name and address plainly. LOOK AT YOUR WRAPPER LABEL.

Dr. Miller's Book, "A Year Among the Bees," and the BEE JOURNAL for one year, we will club for \$1.50.

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A Cheap Smoker.—Martinsville, Ohio, April 11, 1887.—Messrs. Bingham & Hetherington, Abconia, Mich.: Enclosed find \$2.50 for two Large 2½-inch Bingham Smokers (wide shield). They are for my neighbors. I have one of the Bingham Smokers that I have used six years, and it is as good as ever. Send ¼-dozen rates.—Respectfully, AMOS R. GARNER. 17A4t

Simmins' Non-Swarming System is the title of a new English bee-book. The author claims that it will inaugurate a "new era in modern bee-keeping," and states that "it is based upon purely natural principles, and is the only system that can ever be relied upon, because no other condition exists in the economy of the hive that can be applied to bring about the desired result—a total absence of any desire to swarm." It contains 64 pages; is well printed and illustrated. Price 50 cents. It can now be obtained at this office.

Advertisements.

W. Z. HUTCHINSON,

Rogersville, Genesee Co., Mich.,

DESIRES to briefly outline the contents of his little book.

"THE PRODUCTION OF COMB HONEY."

The "Introduction" gives a concise sketch of the author's experience in producing comb honey, and explains how the book came to be written. The first chapter, "Securing workers for the harvest," sets forth the advantages of cellar-wintering combined with spring protection. "Aside from food in abundance, warmth is the one great thing needed to promote safe, early breeding." The cheapest and best method of securing this is given in detail. Under the head of "Supers" the author names his favorite surplus case, and gives reasons for the preference.

The next topic is that of "Separators." Their advantages and disadvantages; the conditions under which they are needed and the methods necessary to their abandonment are briefly told. Then "Sections" are taken up; the good and bad qualities of the different kinds mentioned; the time for putting them on given and the advantages of having them filled with comb, especially in the spring, fully explained.

The next three pages are devoted to "Tying-Up," in which the operations of this system are explicitly described, showing the ease with which it enables a bee-keeper to handle a "honey shower." Then follow: "Hiving swarms on empty combs; Hiving swarms on foundation; and Hiving swarms on empty frames;" in which the question of profitably dispensing with full sheets of foundation in the brood-nest when hiving swarms is made perfectly clear, and thorough instructions given for its accomplishment.

"The building of drone-comb."—This appears to have been the great stumbling-stone in the road to success with starters only, hence six pages are given up to this subject. Why bees build it, is well considered, and the way to prevent its construction made plain. The next two pages are used in answering the question, "What shall be used in the sections?" That is, when shall foundation be used, when combs and when shall the bees be allowed to build the combs. Under the head of "Secretion and utilization of wax," attention is called to the fact that we have been losing a big thing by not utilizing the natural wax secretion. Illustrations are given, and suggestions made.

The "Conclusion" requests "the freest of criticism," and cautions all not to adopt the methods advised upon too large a scale at first.

Price of the Book, 25 cents.

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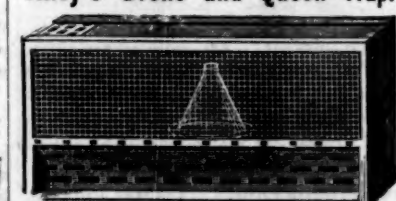
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High Side Walls, 4 to 14 square feet to the pound. Wholesale and Retail. Circulars and Samples free
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Alley's Drone and Queen Trap.



Price, by Express, 50 cts.; by mail, 65 cts.; 12 in the flat, and one nailed (13 in all), \$3.50; 50, in the flat, \$12.00. Address.

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